We claim:

1. A method for inhibiting tumor growth in a mammal comprising the steps of administering to the mammal:

an anti-endoglin antibody or antigen binding fragment thereof; and

a chemotherapeutic agent

wherein the combination of the anti-endoglin antibody or antigen binding fragment thereof and the chemotherapeutic agent has a synergistic effect on the inhibition of tumor growth.

2. The method of claim 1, wherein the anti-endoglin antibody is a monoclonal antibody.

3. The method of claim 1, wherein the anti-endoglin antibody is a polyclonal antibody.

4. The method of claim 2, wherein the monoclonal antibody is selected from the group consisting of SN6, SN6a, SN6b, SN6c, SN6d, SN6e, SN6f, SN6g, SN6h, SN6i, SN6j and SN6k.

5. The method of claim 1, wherein the antigen binding fragment is selected from the group consisting of $F(ab')_2$, Fab', Fab, Fv, Fd', Fd, single chain Fv and derivatives of single chain Fv fragments.

6. The method of claim 1, wherein the anti-endoglin antibody and the chemotherapeutic agent are administered sequentially.

7. The method of claim 1, wherein the anti-endoglin antibody and the chemotherapeutic agent are administered simultaneously.

8. The method of claim 1, wherein the chemotherapeutic agent is selected from the group consisting of cyclophosphamide, 5-fluorouracil, paclitaxel, methotrexate, cisplatin and doxorubicin.

9. The method of claim 1, wherein the anti-endoglin antibody is SN6j and the chemotherapeutic agent is cyclophosphamide.

10. The method of claim 1, wherein the anti-endoglin antibody is SN6j and the chemotherapeutic agent is doxorubicin.

11. A method for inhibiting tumor growth in a mammal comprising the steps of administering to the mammal:

an anti-endoglin antibody which binds to the same epitope as SN6j or an antigen binding fragment of the anti-endoglin antibody; and

a chemotherapeutic agent selected from the group consisting of cyclophosphamide and doxorubicin

wherein the combination of the anti-endoglin antibody or antigen binding fragment thereof and the chemotherapeutic agent has a synergistic effect on the inhibition of tumor growth.

12. The method of claim 11 wherein the chemotherapeutic agent is cyclophosphamide.

13. The method of claim 11 wherein the chemotherapeutic agent is doxorubicin.